Contents of volume 63

No 1: pp 1- 76 published July 31, 1991
No 2: pp 77–156 published August 20, 1991
No 3/4: pp 157–314 published October 8, 1991
No 5: pp 315–404 published November 11, 1991
No 6: pp 405–474 published November 25, 1991

Ågren JJ, Pekkarinen H, Litmanen H, Hänninen O: Fish diet and physical fitness in relation to membrane and serum lipids, prostanoid metabolism and platelet aggregation in female students 393
Alméras N, Mimeault N, Serresse O, Boulay MR, Tremblay A: Non-exercise daily energy expenditure and physical activity pattern in male endurance athletes 184
Anderson RA, Bryden NA, Polansky MM, Thorp JW: Effects of carbohydrate loading and underwater exercise on circulating cortisol, insulin and urinary losses of chromium and zinc 146
Arsenault AB → Bilodeau M

Bach V, Libert JP, Tassi P, Wittersheim G, Johnson LC, Ehrhart J: Cardiovascular responses and electroencephalogram disturbances to intermittent noises: effects of nocturnal heat and daytime exposure 330
Balks HJ → Selberg O
Ball D → Greenhaff PL
Banssillon V → Leftheriotis G
Beelen A, Sargeant AJ: Effect of lowered muscle temperature on the physiological response to exercise in men 387
Beneke R, Neuerburg J, Bohndorf K: Muscle cross-section measurement by magnetic resonance imaging 424
Ben-Ezra V, Verstraete R: Step ergometry: is it taskspecific training? 261
Bennett T → Rahman MA
Berry MN → Withers RT
Bilodeau M, Arsenault AB, Gravel D, Bourbonnais D: EMG power spectra of elbow extensors during ramp and step isometric contractions 24
Blomstrand E, Hassmén P, Ekblom B, Newsholme EA: Administration of branched-chain amino acids during sustained exercise - effects on performance and on plasma concentration of some amino acids 83
Bohndorf K → Beneke R
Boisvert D → Brisson GR
Boisvert P → Brisson GR
Bongbélé J → Roy JY
Borkhoff C → Hughson RL
Bothorel B, Dewasmes G, Hoeft A, Candas V: Temperature and sweating responses in one-legged and two-legged exercise 157
Boulay MR → Alméras N
Bourbonnais D → Bilodeau M
Breigan B → Jensen J
Brinkman M → Withers RT
Brisson GR, Boisvert P, Péronnet F, Perrault H, Boisvert D, Lafond JS: A simple and disposable sweat collector 269
Brisson GR → Roy JY
Brookes FBC → Winter EM
Brown JMM, Gilleard W: Transition from slow to ballistic movement: development of triphasic electromyogram patterns 381
Bryden NA → Anderson RA
Butler GC → Hughson RL
Byrne JM → Nosaka K
Byström EG, Mathiassen SE, Fransson-Hall C: Physiological effects of micropauses in isometric handgrip exercise 405

Cade JR, Reese RH, Privette RM, Hommen NM, Rogers JL, Fregly MJ: Dietary intervention and training in swimmers 210
Candas V → Bothorel B
Cardin S → Roy JY
Carlström K → Tsai L
Chaloa K → McDowell SL
Chatard JC, Lavoie JM, Lacour JR: Energy cost of front-crawl swimming in women 12
Chow N → Zhang Y-Y
Clark DG → Withers RT
Clarkson PM → Nosaka K
Coates G → Green HJ
Crenshaw AG, Friden J, Thornell L-E, Hargens AR: Extreme endurance training: evidence of capillary and mitochondria compartmentalization in human skeletal muscle 173
Cupido CM → Hicks AL
Cymerman A → Young AJ

Dahl HA → Jensen J
Dalton PA, Stokes MJ: Acoustic myography reflects force changes during dynamic concentric and eccentric contractions of the human biceps brachii muscle 412
Davenne D → Mougin F
Davis JA → Lasko-McCarthey P
de Koning JJ → van Ingen Schenau GJ
Dent J → Hicks AL
Desplanches D, Mayet MH, Ilyina-Kakueva EI, Frutoso J, Flandrois R: Structural and metabolic properties of rat muscle exposed to weightlessness aboard cosmos 1887 288
Dewasmes G → Bothorel B
Dubost J → Leftheriotis G
Ducharme MB, VanHelder WP, Radomski MW: Cyclic intramuscular temperature fluctuations in the human forearm during cold-water immersion 188
Duchateau J, Hainaut K: Effects of immobilization on electromyogram power spectrum changes during fatigue 458
Dunnett M → Greenhaff PL

Edwards RHT → Savage RA
Ehrhart J → Bach V
Eisold M → Gülch RW
Ekblom B → Blomstrand E
Era P → Sipilä S
Esselbach PC → Withers RT

Flandrois R → Desplanches D
Foster C → Gorostiaga EM
Foxdal P, Sjödin A, Östman B, Sjödin B: The effect of different blood sampling sites and analyses on the relationship between exercise intensity and 4.0 mmol·l^{-1} blood lactate concentration 52
Fransson-Hall C → Byström EG
Fregly MJ → Cade JR
Freidel M → Leftheriotis G
Friden J → Crenshaw AG
Frutoso J → Desplanches D
Fry RW, Morton AR, Garcia-Webb P, Keast D: Monitoring exercise stress by changes in metabolic and hormonal responses over a 24-h period 228
Fuchs P → Gülch RW

Gabriel H, Urhausen A, Kindermann W: Circulating leucocyte and lymphocyte subpopulations before and after intensive endurance exercise to exhaustion 449
Garcia-Webb P → Fry RW
Garnier A → Mougin F
Gass EM → Gass GC
Gass GC, McLellan TM, Gass EM: Effects of prolonged exercise at a similar percentage of maximal oxygen consumption in trained and untrained subjects 430
Gavhed DCE, Nielsen R, Holmer I: Thermoregulatory and subjective responses of clothed men in the cold during continuous and intermittent exercise 29
Geist A → Gülch RW
Gilleard W → Brown JMM
Goodhead K → Rahman MA
Gore CJ → Withers RT
Gorostiaga EM, Walter CB, Foster C, Hickson RC: Uniqueness of interval and continuous training at the same maintained exercise intensity 101
Goubel F → Pérot C
Gravel D → Bilodeau M
Green HJ, Coates G, Sutton JR, Jones S: Early adaptations in gas exchange, cardiac function and haema-

tology to prolonged exercise training in man 17
Greenhaff PL, Harris RC, Snow DH, Sewell DA, Dunnett M: The influence of metabolic alkalosis upon exercise metabolism in the thoroughbred horse 129
Greenhaff PL, Leiper JB, Ball D, Maughan RJ: The influence of dietary manipulation on plasma ammonia accumulation during incremental exercise in man 338
Gülch RW, Fuchs P, Geist A, Eisold M, Heitkamp H-C: Eccentric and posteccentric contractile behaviour of skeletal muscle: a comparative study in frog single fibres and in humans 323
Guezennec CY, Lienhard F, Louisy F, Renault G, Tusseau MH, Portero P: In situ NADH laser fluorimetry during muscle contraction in humans 36
Gunga H-C → Schwandt H-J
Häkkinen K, Pakarinen A: Serum hormones in male strength athletes during intensive short term strength training 194

Hänninen O → Ågren JJ
Hainaut K → Duchateau J
Hall CB → Lukaski HC
Hargens AR → Crenshaw AG
Harris RC → Greenhaff PL
Hassmén P → Blomstrand E
Heitkamp H-C → Gülch RW
Hemmingsson P → Tsai L
Høyduck B → Schwandt H-J
Hicks AL, Cupido CM, Martin J, Dent J: Twitch potentiation during fatiguing exercise in the elderly: the effects of training 278
Hickson RC → Gorostiaga EM
Hoeft A → Bothorel B
Holmer I → Gavhed DCE
Hommen NM → Cade JR
Housh TJ → McDowell SL
Hughson RL → Yamamoto Y
Hughson RL, Xing HC, Borkhoff C, Butler GC: Kinetics of ventilation and gas exchange during supine and upright cycle exercise 300

Ilyina-Kakueva EI → Desplanches D
Ito K → Matsumoto T

Jacobs R → van Ingen Schenau GJ
Järvinen M → Kannus P
Jeanprêtre N → Schneeberger D
Jensen J, Oftebro H, Breigan B, Johnsson A, Öhlin K, Meen HD, Strømme SB, Dahl HA: Comparison of changes in testosterone concentrations after strength and endurance exercise in well trained men 467
Jéquier E → Schneeberger D
Johansson C → Tsai L
Johnson GO → McDowell SL
Johnson II MC → Zhang Y-Y
Johnson LC → Bach V
Johnsson A → Jensen J
Jones S → Green HJ
Jørgensen K → Krogh-Lund C
Jørgensen K → Winkel J

Kalfon F → Leftheriotis G
Kannus P, Järvinen M, Lehto M: Maximal peak torque as a predictor of angle-specific torques of hamstring and quadriceps muscles in man 112
Kantelip JP → Mougin F
Kaszuba J → Patton JF
Keast D → Fry RW
Kindermann W → Gabriel H
Koziris LP, Montgomery DL: Blood lactate concentration following intermittent and continuous cycling tests of anaerobic capacity 273
Krogh-Lund C, Jørgensen K: Changes in conduction velocity, median frequency, and root mean squareamplitude of the electromyogram during 25% maximal voluntary contraction of the triceps brachii muscle, to limit of endurance 60
Kroon GW, Naeije M: Recovery of the human biceps electromyogram after heavy eccentric, concentric or isometric exercise 444
Kujala UM → Viljanen T
Kurokawa T → Ueda T

Lacour JR → Chatard JC
Lafond JS → Brisson GR
Lasko-McCarthey P, Davis JA: Effect of work rate increment on peak oxygen uptake during wheelchair ergometry in men with quadriplegia 349
Lavoie JM → Chatard JC
Lavoie J-M → Roy JY
Le Bozec S, Rougier P: Development of muscle fatigue during intermittent submaximal static contraction in an agonist heterogeneous muscle group 293
Lefebvre P → Pallikarakis N
Leftheriotis G, Saumet JL, Kalfon F, Dubost J, Banssillon V, Freidel M: Effects of hypotension on cutaneous and subcutaneous blood flow in anaesthetized humans 205
Lehto M → Kannus P
Leiper JB → Greenhaff PL
Libert JP → Bach V
Lienhard F → Guezennec CY
Litmanen H → Ågren JJ
Lopez J → Palazzo MG
Louisy F → Guezennec CY
Lukaski HC, Hall CB, Siders WA: Altered metabolic response of iron-deficient women during graded, maximal exercise 140

Mackay MH → Withers RT
Mackinnon LT → Sleivert G
Magnin P → Mougin F
Malchaire JB: Predicted sweat rate in fluctuating thermal conditions 282
Martin J → Hicks AL
Martinson H, Stokes MJ: Measurement of anterior tibial muscle size using real-time ultrasound imaging 250
Mathiassen SE → Byström EG
Matsumoto T, Ito K, Moritani T: The relationship between anaerobic threshold and electromyographic fatigue threshold in college women 1
Maughan RJ → Greenhaff PL
Mayet MH → Desplanches D
Mc Lellan TM: The influence of respiratory acidos, on the exercise blood lactate response 6
McCullongh RE → Young AJ
McDowell SL, Chaloa K, Housh TJ, Tharp GD, Johnson GO: The effect of exercise intensity and duration on salivary immunoglobulin A 108
McGuiggin ME → Nosaka K
McLellan TM → Gass GC
Medcalf JF → Rahman MA
Meen HD → Jensen J
Mello RP → Patton JF
Mercier B → Mercier J
Mercier J, Varray A, Ramonatxo M, Mercier B, Préfaut C: Influence of anthropometric characteristics on changes in maximal exercise ventilation and breathing pattern during growth in boys 235
Millerchip R → Savage RA
Mimeault N → Alméras N
Miyashita M → Yamamoto Y
Miyazaki Y → Seki K
Montgomery DL → Koziris LP
Moore LG → Young AJ
Mora I → Pérot C
Morel DR → Palazzo MG
Moritani T → Matsumoto T
Morton AR → Fry RW
Mougin F, Simon-Rigaud ML, Davenne D, Renaud A, Garnier A, Kantelip JP, Magnin P: Effects of sleep disturbances on subsequent physical performance 77
Müller MJ → Selberg O
Mutoh Y → Yamamoto Y

Naeije M → Kroon GW
Nagata A → Seki K
Narusawa M → Seki K
Neuerburg J → Beneke R
Newsholme EA → Blomstrand E
Nielsen R → Gavhed DCE
Nolan SR → Withers RT
Nosaka K, Clarkson PM, McGuiggin ME, Byrne JM: Time course of muscle adaptation after high force eccentric exercise 70
Nye ER → Sutherland WHF

O'Connor M → Rahman MA
Öhlin K → Jensen J
Östman B → Foxdal P
Oftebro H → Jensen J

Pakarinen A → Häkkinen K
Palazzo MG, Morel DR, Lopez J: Effect of phentolamine on the relationship between O_2 consumption and delivery in sheep 223

Pallikarakis N, Sphiris N, Lefebvre P: Influence of the bicarbonate pool and on the occurrence of $^{13}CO_2$ in exhaled air 179
Patton JF, Kaszuba J, Mello RP, Reynolds KL: Physiological responses to prolonged treadmill walking with external loads 89
Pekkarinen H → Ågren JJ
Péronnet F → Brisson GR
Pérot C, Goubel F, Mora I: Quantification of T- and H-responses before and after a period of endurance training 368
Perrault H → Brisson GR
Polansky MM → Anderson RA
Portero P → Guezennec CY
Pousette Å → Tsai L
Préfaut C → Mercier J
Privette RM → Cade JR

Radomski MW → Ducharme MB
Rahman MA, Goodhead K, Medcalf JF, O'Connor M, Bennett T: Haemodynamic responses to nonhypotensive central hypovolaemia induced by lower body negative pressure in men and women 151
Ramonatxo M → Mercier J
Raper SA, Soames RW: The influence of stationary auditory fields on postural sway behaviour in man 363
Reese RH → Cade JR
Reeves JT → Young AJ
Renaud A → Mougin F
Renault G → Guezennec CY
Reynolds KL → Patton JF
Robertson MC → Sutherland WHF
Röcker L → Schwandt H-J
Rogers JL → Cade JR
Rougier P → Le Bozec S
Roy JV, Bongbélé J, Cardin S, Brisson GR, Lavoie J-M: Effects of supramaximal exercise on blood glucose levels during a subsequent exercise 48

Sargeant AJ → Beelen A
Saumet JL → Leftheriotis G
Savage RA, Millerchip R, Whitehouse GH, Edwards RHT: Lumbar muscularity and its relationship with age, occupation and low back pain 265
Schlaak S → Selberg O
Schneeberger D, Tappy L, Temler E, Jeanprêtre N, Jéquier E: Effects of muscarinic blockade on the thermic effect of oral or intravenous carbohydrate 242
Schwandt H-J, Heyduck B, Gunga H-C, Röcker L: Influence of prolonged physical exercise on the erythropoietin concentration in blood 463
Seki K, Miyazaki Y, Watanabe M, Nagata A, Narusawa M: Surface electromyogram spectral characterization and motor unit activity during voluntary ramp contraction in men 165
Selberg O, Schlaak S, Balks HJ, von zur Mühlen A, Müller MJ: Thermogenic effect of adrenaline: interaction with insulin 417
Serresse O → Alméras N
Sewell DA → Greenhaff PL
Sherman WM → Withers RT
Shinohara M → Yamamoto Y
Siders WA → Lukaski HC
Simon-Rigaud ML → Mougin F
Sipilä S, Viitasalo J, Era P, Suominen H: Muscle strength in male athletes aged 70–81 years and a population sample 399
Sjödin A → Foxdal P
Sjödin B → Foxdal P
Sleivert G, Mackinnon LT: The validation of backward extrapopulation of submaximal oxygen consumption from the oxygen recovery curve 135
Snow DH → Greenhaff PL
Soames RW → Raper SA
Sphiris N → Pallikarakis N
Stokes MJ → Martinson H
Stokes MJ → Dalton PA
Strømme SB → Jensen J
Stroud MA: Effects on energy expenditure of facial cooling during exercise 376
Suominen H → Sipilä S
Sutherland WHF, Robertson MC, Williamson SA, Nye ER: Plasma noncholesterol sterols in male distance runners and sedentary men 119
Sutton JR → Green HJ

Tamura S → Yamamoto Y
Tappy L → Schneeberger D
Tassi P → Bach V
Tegelman R → Tsai L
Temler E → Schneeberger D
Tharp GD: Basketball exercise and secretory immunoglobulin A 312
Tharp GD → McDowell SL
Thissen CEAM → van Dieën JH
Thornell L-E → Crenshaw AG
Thorp JW → Anderson RA
Toussaint HM → van Dieën JH
Tremblay A → Alméras N
Tsai L, Johansson C, Pousette Å, Tegelman R, Carlström K, Hemmingsson P: Cortisol and androgen concentrations in female and male elite endurance athletes in relation to physical activity 308
Tusseau MH → Guezennec CY

Ueda T, Kurokawa T: Validity of heart rate and ratings of perceived exertion as indices of exercise intensity in a group of children while swimming 200
Urhausen A → Gabriel H

van de Ven AJGM → van Dieën JH
van Dieën JH, Thissen CEAM, van de Ven AJGM, Toussaint HM: The electro-mechanical delay of the erector spinae muscle: influence of rate of force development, fatigue and electrode location 216
van Ingen Schenau GJ, Jacobs R, de Koning JJ: Can cycle power predict sprint running performance? 255
VanHelder WP → Ducharme MB
Varray A → Mercier J
Verstraete R → Ben-Ezra V
Viitasalo J → Sipilä S
Viitasalo JT → Viljanen T
Viljanen T, Viitasalo JT, Kujala UM: Strength characteristics of a healthy urban adult population 43
von zur Mühlen A → Selberg O

Walter CB → Gorostiaga EM
Wasserman K → Zhang Y-Y
Watanabe M → Seki K
Whitehouse GH → Savage RA
Williamson SA → Sutherland WHF
Winkel J, Jørgensen K: Significance of skin temperature changes in surface electromyography 345
Winter EM, Brookes FBC: Electromechanical response times and muscle elasticity in men and women 124
Withers RT, Gore CJ, Mackay MH, Berry MN: Some aspects of metabolism following a 35 km road run 436
Withers RT, Sherman WM, Clark DG, Esselbach PC, Nolan SR, Mackay MH, Brinkman M: Muscle metabolism during 30, 60 and 90 s of maximal cycling on air-braked ergometer 354
Wittersheim G → Bach V

Xing HC → Hughson RL

Yamamoto Y, Miyashita M, Hughson RL, Tamura S, Shinohara M, Mutoh Y: The ventilatory threshold gives maximal lactate steady state 55
Young AJ, Young PM, McCullough RE, Moore LG, Cymerman A, Reeves JT: Effect of beta-adrenergic blockade on plasma lactate concentration during exercise at high altitude 315
Young PM → Young AJ

Zhang Y-Y, Johnson II MC, Chow N, Wasserman K: The role of fitness on $\dot{V}O_2$ and $\dot{V}CO_2$ kinetics in response to proportional step increases in work rate 94